

# GLOVE BOX ASSEMBLY FOR AUTOMOBILES

## RELATED APPLICATION

5           The present disclosure relates to subject matter contained  
in Korean application No. 2003-82289, filed on November 19,  
2003, which is herein expressly incorporated by reference its  
entirety.

## 10           BACKGROUND OF THE INVENTION

### Field of the Invention

15           The present invention relates to a glove box assembly  
for automobiles, and more particularly to a glove box assembly  
having an identifying member formed therein, by means of which  
a knob of the glove box assembly selectively mounted in the  
left or right side of an instrument panel of an automobile is  
easily assembled while being viewed with the naked eye of a  
worker.

### 20           Description of the Related Art

Generally, an automobile is provided at various areas  
with storage compartments for storing various kinds of  
articles.

25           Specifically, the automobile includes a trunk for storing

relatively large articles, and a glove box assembly for storing relatively small articles.

If articles are too large or too long to be stored in the trunk of the automobile or in the interior of the automobile,  
5 an additional storage unit may be mounted to the roof of the automobile.

Fig. 1 is an exploded perspective view showing a conventional glove box assembly 10 for automobiles. As shown in Fig. 1, the conventional glove box assembly 10 comprises: a  
10 housing 13 mounted in an instrument panel 2 disposed in front of a passenger seat (not shown) of the automobile; and a lid 11 attached to the front part of the housing 13.

The top of the housing 13 of the glove box assembly 10 is opened. At either side of the housing 13 adjacent to the lower  
15 end of the housing 13 is formed a hinge 12, by means of which the housing is mounted into the instrument panel 2 in such a manner that the housing 13 is inserted into or drawn out from the instrument panel 2 while being rotated about the hinge 12.

Also, the glove box assembly 10 is provided with a  
20 locking unit for selectively locking the glove box assembly 10 in the instrument panel 2.

The locking unit is fixed to the upper part of the lid 11 of the glove box assembly 10.

The locking unit comprises: a knob 14 rotatably fitted to  
25 the upper part of the lid 11 such that the knob 14 is pulled

upward; a locker 16 attached to the inside of the knob 14 such that the locker 16 is moved in the same fashion as the knob 14; and a striker 4 fixed to the inside of the instrument panel 2 by means of bolts 6 such that the locker 16 is caught by the  
5 striker 4.

In the glove box assembly 10 constructed as described above, the housing 13 of the glove box assembly 10 remains inserted in the instrument panel 3 at normal times. When a passenger pulls the knob 14 upward to take out articles from  
10 the housing 13, the locker 16 attached to the inside of the knob 14 is separated from the striker 4 so that the housing 13 is rotated about the hinge 12. Consequently, the glove box assembly 10 is drawn out of the instrument panel 2.

The construction of the above-mentioned locking unit of  
15 the glove box assembly is disclosed in Japanese Unexamined Patent Publication No. 2001-098818.

In the conventional glove box assembly, however, the shape of the knob varies, depending upon whether the glove box assembly is mounted on the left or right side of the instrument  
20 panel. As a result, the knob may be inappropriately assembled in the glove box, and thus the knob may be damaged.

#### SUMMARY OF THE INVENTION

25 Therefore, the present invention has been made in view

of the above problems, and it is an object of the present invention to provide a glove box assembly having an identifying member formed therein, by means of which a knob of the glove box assembly is properly fitted in a lid of the glove box assembly on the basis of the lid of the glove box assembly mounted in the left or right side of an instrument panel of an automobile

In accordance with the present invention, the above and other objects can be accomplished by the provision of a glove box assembly for automobiles comprising: a housing selectively mounted to the left or right side of an instrument panel from a driver seat of the automobile; a lid rotatably attached to the front part of the housing; a knob rotatably fitted in the lid such that the housing is opened or closed by means of the lid; and an identifying member for identifying the knob fitted into the lid.

#### BRIEF DESCRIPTION OF THE DRAWINGS

The above and other objects, features and other advantages of the present invention will be more clearly understood from the following detailed description taken in conjunction with the accompanying drawings, in which:

Fig. 1 is an exploded perspective view showing a conventional glove box assembly for automobiles;

Fig. 2 is an exploded perspective view showing a glove box assembly for automobiles according to a preferred embodiment of the present invention;

5 Fig. 3a is a view showing a knob fitted in a lid of the glove box assembly in case the glove box assembly is mounted in the left side of an instrument panel;

Fig. 3b is a view showing a knob fitted to a lid of the glove box assembly in the case that the glove box assembly is mounted in the right side of an instrument panel;

10 Fig. 4a is a sectional view of the glove box assembly shown in Fig. 3a; and

Fig. 4b is a sectional view of the glove box assembly shown in Fig. 3b.

## 15 DESCRIPTION OF THE PREFERRED EMBODIMENTS

Now, a preferred embodiment of the present invention will be described in detail with reference to the accompanying drawings.

20 Fig. 2 is an exploded perspective view showing a glove box assembly 30 for automobiles according to a preferred embodiment of the present invention.

Fig. 3a is a view showing a knob fitted to the lid of the glove box assembly if the glove box assembly is mounted to  
25 the left side of an instrument panel of an automobile, and

Fig. 3b is a view showing a knob fitted in a lid of the glove box assembly in the case the glove box assembly is mounted to the right side of an instrument panel of an automobile. Fig. 4a is a sectional view of the glove box assembly shown in Fig. 3a, and Fig. 4b is a sectional view of the glove box assembly shown in Fig. 3b.

As shown in Figs. 2 to 4b, the glove box assembly 30 comprises a housing 33 selectively mounted to the left or right side of an instrument panel 22 from the driver's seat of the automobile, a lid 31a; 31b rotatably attached to the front part of the housing 33, a knob 34a; 34b rotatably fitted in the lid 31a; 31b such that the housing 33 is opened or closed by means of the lid 31a; 31b, and an identifying member 100 for identifying the knob 34a; 34b fitted into the lid 31a; 31b.

The glove box assembly 30 is mounted in a prescribed side of the instrument panel 22 of the automobile.

Specifically, the glove box assembly 30 is mounted to the left or right side of the instrument panel 22 according to automobile standards in the country wherein is to be sold.

As shown in Fig. 2, the glove box assembly 30 is mounted in the right side of the instrument panel 22.

The glove box assembly 30 includes the housing 33 mounted to the instrument panel 22, and the lid 31b rotatably attached to the front part of the housing 33 such that the housing 33 is opened or closed by means of the lid 31b.

Specifically, the lid 31b is rotatably attached to the front part of the housing 33 such that the housing 33 is opened or closed by means of the lid 31b while the lid 31b is hinged at the lower edge of the housing 33.

5           To the center area of the upper part of the housing 33 is attached a striker 24 for locking the lid 31b, by means of which the front part of the housing is closed.

          The knob 34b is fitted to the center area of the upper part of the lid 31b.

10           At this time, the knob 34b is disposed while corresponding to the striker 24 attached to the housing 33 so that the knob 34b is locked by means of the striker 24.

          At the end of the knob 34b is formed a locker 36, which is selectively engaged with the striker 24.

15           The housing 33 is selectively mounted in the left or right side of the instrument panel 22, and the lid 31b is attached to the housing 33.

          The knob 34a; 34b is properly fitted to a prescribed area on the lid 31a; 31b by means of the identifying member 100 so  
20           that incorrect assembly of the knob 34a; 34b is prevented.

          As shown in Figs. 3a and 4a, the glove box assembly 30 is mounted in the left side of the instrument panel 22 from the center of the instrument panel 22 or from the driver seat of the automobile.

25           At the front part of the housing 33 of the glove box

assembly 30 is attached to the lid 31a.

At this time, the lid 31a is properly attached to the housing 33 by means of the identifying member 100.

The identifying member 100 comprises: a guide groove 112  
5 formed at the inside of the lid 31a; and a guide protrusion 114  
formed at the knob 34a such that the guide protrusion 114 is  
inserted into the guide groove 112.

The guide groove 112 is formed on the inside of the lid  
31a into which the knob 34a is fitted.

10 The lid 31a is rotatably attached to the front part of  
the housing 33, mounted into the left side of the instrument  
panel 22. The knob 34a is only fitted on the lid 31a.

The guide protrusion 114 is formed at the knob 34a in  
such a manner that the guide protrusion 114 corresponds to the  
15 guide groove 112 of the lid 31a.

The guide protrusion 114 is inserted into the guide  
groove 112, which is depressed as shown in the drawings.

The guide groove 112 may be formed at one side on the  
edge of the lid 31a or at either side of the edge of the lid  
20 31a.

When the guide protrusion 114 is inserted into the guide  
groove 112, it is determined that the knob 34a is properly  
fitted into the lid 31a.

As shown in Figs. 3b and 4b, the glove box assembly 30  
25 may be mounted into the right side of the instrument panel 22

from the center of the instrument panel 22 or from the driver seat of the automobile.

At the front part of the housing 33 of the glove box assembly 30 is attached to the lid 31b, as in the glove box assembly described in detail with reference to Figs. 3a and 4a.

The lid 31b is properly attached to the housing 33 by means of the identifying member 100.

The identifying member 100 comprises: a guide groove 122 formed on the inside of the lid 31b; and a guide protrusion 124 formed at the knob 34b such that the guide protrusion 124 is inserted into the guide groove 122.

The guide groove 122 is formed at the inside of the lid 31b in which the knob 34b is fitted.

The position of the guide groove 122 formed at the inside of the lid 31b mounted in the right side of the instrument panel 22 is different from that of the guide groove 112 formed on the inside of the lid 31a mounted into the left side of the instrument panel 22.

The lid 31b is rotatably attached to the front part of the housing 33 mounted in the right side of the instrument panel 22. The knob 34b is only fitted in the lid 31b.

The guide protrusion 124 is formed at the knob 34b in such a manner that the guide protrusion 124 corresponds to the guide groove 122 of lid 31b.

The position of the guide protrusion 124 of the knob 34b

disposed at the right side of the instrument panel 22 is different from that of the guide protrusion 114 of knob 34a disposed on the left side of the instrument panel 22.

5 The guide protrusion 124 is inserted into the guide groove 122, which is depressed as shown in the drawings.

The guide groove 122 may be formed at one side of the edge of the lid 31b or at either side of the edge of the lid 31b.

10 When the guide protrusion 124 is inserted into the guide groove 122, it is determined that the knob 34b is properly fitted into the lid 31b.

Consequently, incorrect assembly of the glove box assembly 30 is prevented by means of the identifying member 100.

15 As apparent from the above description, the present invention provides a glove box assembly having an identifying member formed on the lid and knob of the glove box assembly selectively mounted into the left or right side of an instrument panel so that the knob is properly fitted in the lid, whereby incorrect assembly of the glove box assembly is prevented.

20 Although the preferred embodiment of the present invention has been disclosed for illustrative purposes, those skilled in the art will appreciate that various modifications, additions and substitutions are possible, without departing

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from the scope and spirit of the invention as disclosed in the accompanying claims.